

naturalists have been more fortunate ; but surely, in face of the almost complete absence from ornithological literature of the accounts of the behaviour of these birds on land, the observations of these others will hardly come amiss.

IV.—*On some Birds and Eggs lately collected at Cape York, Queensland, by Mr. H. G. Barnard.* By D. LE SOUËR, Melbourne.

(Plate I.)

1. *TALEGALLUS PURPUREICOLLIS* sp. nov. Cape York. (Barnard's Talegallus.)

This species is found in the Cape York Peninsula. Mr. K. Broadbent observed it during his extended visit there some years ago. Mr. Jardine, of Somerset, Cape York, and Mr. H. G. Barnard have lately noticed the variation between it and the southern form, and the latter has kindly sent me some skins. The principal difference between the two birds is in the coloration of the lower portion of the neck and wattles, which in *Talegallus purpureicollis* (the name by which I propose to call it) is of a purplish white, and in *Talegallus lathamii* red, with yellow wattles. Otherwise the birds are very similar : but, as Mr. H. G. Barnard says, "anyone who has seen the bird in life will at once observe the difference." The bright colours soon fade on the death of the bird, and the difference is not then so noticeable, although it can still be observed. During the breeding-season, from October until January, the wattle of the male is  $1\frac{1}{2}$  inch in length, hanging from the lower portion of the neck. When the breeding-season is over the wattle shrinks and disappears ; it is then more difficult to tell the male from the female when seen in the scrub.

The total length of the adult male is 29 inches, wing 16 inches, and leg 11 inches. Its head and upper portion of the neck red, lower portion of the neck, with wattles, whitish purple ; eyes very light brown, almost white ; bill black ; feet and legs dark brown ; the upper surface is blackish

brown, the tail being almost black; the feathers of the under surface are also blackish brown, tipped with light grey.

The female is slightly smaller than the male; the coloration of the head and neck is not so bright, and she has no wattle, otherwise she is similar.

The eggs of this bird are oval in shape and smaller at one end; they are pure white and finely granulated. One obtained at Somerset by Mr. Barnard on Nov. 3rd, 1896, measures  $3.61 \times 2.36$  inches.

I propose that this new species should be known in the vernacular lists as Barnard's Talegallus, after Mr. H. Greensill Barnard, one of the most reliable and observant collectors in Australia, whose name, like that of his brother, Charles Barnard, is a household word among Australian naturalists.

## 2. CALORNIS METALLICA Temm. (Shining Calornis.)

These beautiful birds are very plentiful on the north-east coast, and build their bulky hanging nests on the tallest trees they can find, in scrub, forest-country, or mangroves. The tall trees they choose in the scrub are generally almost bare of leaves, and in the forest-country they prefer the locally-called "Moreton-Bay" eucalyptus. Their general habits are very similar to those of the European Starling. They live in flocks of varying numbers and are often seen feeding on the ground; they fly with great rapidity and seem always in a hurry. The way they dart in and out of the thick scrub without coming in contact with the branches is wonderful. When a large colony are nesting on one tree the chatter they make is considerable, and they look like a hive of bees round the top of the tall trees. They evidently feed largely on the fruit of the native nutmeg, as the ground under the trees on which they nest is generally covered thickly with these seeds. The thin branches from which their nests are suspended occasionally break with the extra weight of the nests and fall to the ground. The same trees are used year after year. Mr. H. G. Barnard climbed up one large tree at Somerset, Cape York, and

counted 296 nests on it. He said that the noise made by the birds when he was up the tree was something to be remembered. The nests vary in size and are nearly circular; they measure 7 inches in diameter, and the nesting-chamber  $4\frac{1}{2}$  inches; they are composed principally of dark-coloured curly vine-tendrils, with a lining of finer light-coloured fibres from the palm-trees.

These birds lay from two to three eggs, as many nests having two as those which have three. The clutches vary both in size and coloration, many of the larger eggs especially being well marked on the larger end with dark brown and lilac spots, in many cases confluent and forming an irregular zone. Others have smaller markings of a greyish-brown colour interspersed with lilac markings, but they are more evenly scattered over the surface. Then, again, many of the clutches have no markings, but these are mostly the smaller eggs and are probably those of the younger birds. The ground-colour is greenish white. Some of the eggs are more elongated than others. The following are the measurements of two clutches:—(1) A  $1\cdot16 \times \cdot80$ , B  $1\cdot10 \times \cdot79$ , C  $1\cdot12 \times \cdot78$ ; (2) A  $1\cdot8 \times \cdot70$ , B  $1\cdot6 \times \cdot71$  inch.

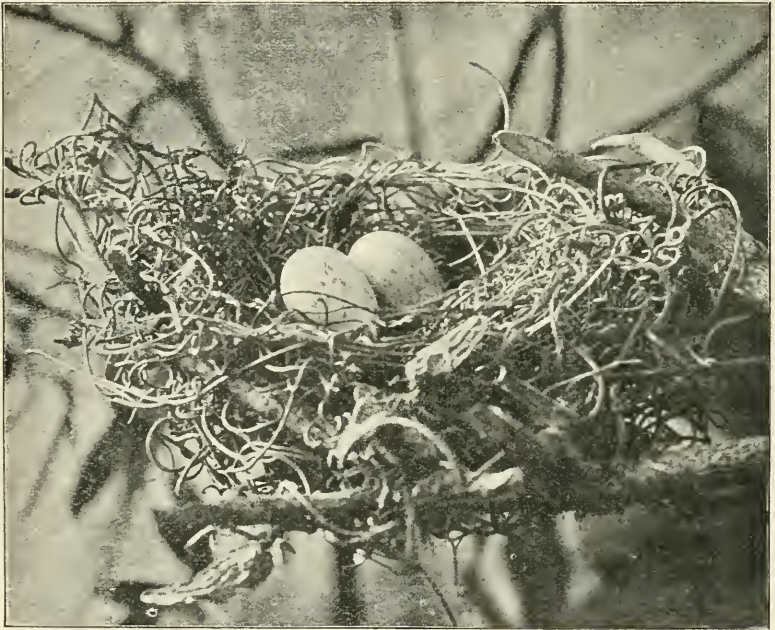
### 3. MYIAGRA LATIROSTRIS (Gould). (Broad-billed Fly-catcher.)

The nest and eggs of this bird were found by Mr. H. G. Barnard at Somerset, Cape York, on December 20th, 1896. He states that the nest was built in a mangrove-tree overhanging a deep stream, and that he had to push the eggs into his handkerchief at the end of a long stick. While he was trying to secure the nest it fell into the water and was carried away by the current. It was very similar to the nest of *M. concinna*, but larger, being about the size of that of *Seisura inquieta*. Later on two more nests were found, but they both contained two young ones. Mr. Barnard met with this bird only in the mangroves, and not in the open forest-country. The ground-colour of the eggs is a dull white, but one of the set sent is a shade darker than the other. The markings are mostly elongated, some greyish brown and others lilac, the latter appearing as if beneath the surface of the shell; they

are principally on the larger end, forming a zone, and on one of the eggs there are scarcely any markings anywhere else, but on the other the markings are more scattered over the surface. They measure:—A  $\cdot 78 \times \cdot 54$ , B  $\cdot 71 \times \cdot 52$  inch.

4. *MANUCODIA GOULDI* (Gray). (Gould's Manucode.)

Mr. H. G. Barnard found the nest and two eggs of this species on January 23rd, 1897, near Somerset; he states that the birds were not numerous and that they were generally in pairs. He shot a female in the beginning of December that had laid an egg a short time previously, but though he



Nest and Eggs of *Manucodia gouldi*.  
(From a photograph.)

hunted about for some time he could not find the nest. The birds were remarkably shy, and it was impossible to get near enough in the scrub to watch them. It is probable that the egg of this bird will always be a rarity, as the nests are

hard to find; they are very similar to those of the Drongo Shrike (*Chibia bracteata*), and the eggs are also somewhat alike. The nest is a shallow, open structure, and is made of curly vine-tendrils, the inside being lined with the same material, only finer, and on the branch on which the nest was built, and in conjunction with it, an orchid was growing, a portion of which the bird had worked into the outside of its nest. It was built on a horizontal fork of a tall scrub-tree growing in forest-country, about 20 yards from dense scrub; the height of the nest from the ground was about 48 feet. Its external diameter is 6 inches, internal 4 inches, external depth  $3\frac{1}{2}$  inches, internal  $1\frac{3}{4}$  inch. The ground-colour of the two eggs varies, in one case being dull white and in the other of a reddish hue. The eggs are thickly marked all over with longitudinal streaks in varying shades of brown, many appearing as if beneath the surface, they being of a lilac colour; the markings or stripes are most numerous on the larger end. They measure:—A  $1\cdot40 \times 1\cdot6$ , B  $1\cdot41 \times 1\cdot4$  inch.

5. TANYSIPTERA SYLVIA (Gould). (White-tailed Kingfisher.)

These beautiful Kingfishers breed on the north-east coast as far south as Cairns, and probably further. Mr. Barnard found them nesting in termites' mounds, both in those situated on the trees and also in those on the ground; some of the nests he took were 30 feet from the ground. They seem to have a certain day to start laying, as he opened ten nests on one day and found them all empty, but five days later he opened twelve nests and found three fresh eggs in each. Both Mr. R. Hislop and I myself have noticed the same thing. The birds burrow a hole in a termites' mound, either on the ground or in a tree, but much more often the former. Shortly after the young birds leave the nest the termites fill in the hole made by the parent Kingfisher. The eggs vary considerably in size; some are slightly pointed at one end, and others are not. One of the sets taken by Mr. Barnard at Somerset on Dec. 17th, 1896, measure:—A  $\cdot98 \times \cdot88$ , B  $1\cdot2 \times \cdot87$ , C  $1\cdot5 \times \cdot85$  inch.



6. *MICROGLOSSUS ATERRIMUS* (Gm.). (Great Palm Cockatoo.)

The egg of this bird has been previously described from New Guinea, but Mr. Barnard has noticed its nesting-habits, which are well worth recording, though he was not fortunate enough to secure the eggs. These birds nest in the forest-country, and having chosen a hollow in a tree they, with their powerful beaks, break off green twigs about the thickness of a man's finger and carry them into the hole, having first removed all the leaves from the twigs. They then bite them into small pieces from two to three inches in length and strew them thickly over the bottom of the hole. One nest to which he climbed up in a large dead bloodwood stump, fully 200 yards from the nearest scrub, had the bottom of the hole covered to a depth of four inches with twigs of scrub-trees. No leaves are put in; the holes themselves are generally two feet in depth. The apparent reason for the twigs being in the hole is that the birds breed from November to March—that is, during the rainy season, and as the holes for their nests are always chosen in upright trunks, the sticks would keep their single white egg or young off the wet rotten débris at the bottom of the hole. An egg of this bird in the collection of Mr. G. A. Kearnland was taken at Cape York in February 1897; it is dull white in colour, and the surface slightly rough, in shape a swollen oval, slightly pointed at one end, and measures  $2.12 \times 1.55$  inch.

7. *PTILOTIS GRACILIS* Gould. (Plate I.) (Graceful Honey-eater.)

This active little bird is found on the north-east coast from Cape York to Cardwell, and probably further. Specimens were secured at Somerset by Mr. Barnard, and in the Bloomfield River district by Mr. Hislop and myself. They seem nowhere very plentiful, and are often found in the open country and in the edges of the scrub. They build their nests among the leaves near the end of a branch of some thickly-foliaged tree, generally some 20 feet or more from the ground.



J.G. Keulemans del et lith.

PTILOTIS GRACILIS.

Mintern Bros imp.

This bird (Plate I.) has been considered by several ornithologists as being the same as *Ptilotis notata* Gould; but both Mr. A. J. Campbell and I myself have gone carefully into this subject and consider that Gould's original description of the two species as being distinct holds good, especially from an oological point of view, although both birds are found in the same locality\*. *P. gracilis* is considerably smaller than *P. notata* and has a proportionately longer bill. Their note, habits, nest, and eggs are all different, and you get no intermediate links between the two birds. Both have been shot off their nests on several occasions by Mr. Barnard at Cape York, and by Mr. Hislop and myself in the Bloomfield River district.

The nest is cup-shaped; the upper portion is composed of green moss and shreds of bark, and the lower portion principally of flat pieces of paper-bark and moss. It is well covered externally with cobwebs; the inside is beautifully and plentifully lined with the glossy white down from the native cotton-plant. Its external diameter is  $2\frac{1}{2}$  inches, internal  $1\frac{3}{4}$  inch; external depth  $2\frac{1}{2}$  inches, internal  $1\frac{1}{2}$  inch. The clutch is of two eggs, and their ground-colour is a rich terra-cotta, varying in intensity and being much darker on the larger end. There are a few dark-brown markings, especially on the larger end; but these vary in different clutches, as in some they are large and of a deeper shade and form an irregular zone round the larger end, and in others the spots are much smaller and more scattered. A set I took in the Bloomfield River district on Nov. 23rd, 1896, measure: A  $\cdot 79 \times \cdot 50$ , B  $\cdot 78 \times \cdot 54$  inch; and another set, taken by Mr. H. G. Barnard at Somerset, measure: A  $\cdot 76 \times \cdot 48$ , B  $\cdot 77 \times \cdot 51$  inch.

Since writing these remarks I have received a letter from

\* [We quite agree with the author that this *Ptilotis* is distinguishable from *P. notata*, and have great pleasure in giving figures of the bird and its nest from Mr. Le Souéf's specimens. Dr. Gadow (Cat. B. ix. p. 227) has united both species to *P. analoga* of New Guinea, and it is possible that the larger *P. notata* may be barely separable from that form, but the group requires careful revision.—EDD.]



Mr. Barnard on the subject, in which he states :—"There can be no mistake about the two Honey-eaters being different, as I shot both kinds from the nests. Both the nests and the eggs are different, and also the birds have a totally different note."

8. *PTILOTIS NOTATA* Gould. (Yellow-spotted Honey-eater.)

This species is very plentiful on the north-east coast, and is probably the most familiar bird in the scrubs, and certainly the most in evidence, as they are very fearless and may often be seen basking in the clear pools of water, of which habit they seem very fond, or dashing one after another among the thickly-growing timber, uttering their loud note as they go, which on such occasions is different from the note they usually utter. They seem to be found most frequently in the scrubs, and rarely in the open forest-country. They often build their nests very low down; one I noticed, with two eggs in it, was suspended to a palm-leaf at the side of the road, and was only six inches from the ground. Two seems to be the general number of the clutch.

The somewhat loosely-built nests are composed principally of shreds of a coarse grass, with pieces of paper-bark, and are lightly covered externally with cobwebs. The interior is lined with the glossy white down from the native cotton-pod; their diameter is  $3\frac{1}{2}$  inches by 3 inches in depth, internal diameter  $2\frac{1}{2}$  inches by 2 inches in depth. The ground-colour of the egg is pure white, but the markings vary considerably. Some have a very few large and very dark brown spots on them, all situated on the larger end; others have the larger end covered with smaller brown spots, often forming a zone, many of the markings appearing as if beneath the surface of the shell; others again have a few small markings equally distributed all over the egg. One clutch Mr. H. G. Barnard took at Somerset on October 28th, 1896, measures: A  $\cdot 88 \times \cdot 61$ , B  $\cdot 84 \times \cdot 60$  inch; and another clutch I took on November 25th, 1896, in the Bloomfield River district, measures: A  $\cdot 88 \times \cdot 65$ , B  $\cdot 87 \times \cdot 66$  inch.

## 9. GERYGONE PERSONATA Gould. (Masked Gerygone)

These little birds are very shy and difficult to secure in the thick scrub where they make their home. One curious circumstance is that they always seem to build their hanging, dome-shaped nests in close proximity to a wasps'-nest, from within a few inches to four feet away, and it is difficult to conjecture for what reason. The nests vary in size and are generally suspended from the end of a thin branch or palm-leaf. They have a porch at the entrance, sometimes going straight in and occasionally upward, and more prominent in some than in others. The nest is composed of fine fibres of grass, and on the lower portion, which hangs loose below, are often fastened the dried excreta of wood-boring caterpillars, which add weight to it and prevent its being blown over or against the nest. Small portions of the same material are often placed on the exterior of the nest. It is lined with fine brown-coloured down off the seeds of scrub-plants; a good deal of cobweb is worked in, which materially helps to keep the lightly-built structure together, and cobweb is also plentifully put on the outside. The nest measures in depth 5 inches, exclusive of 3 inches of loose material hanging under it. Inside chamber  $2\frac{1}{2}$  inches. Breadth: external  $2\frac{1}{2}$  inches, top of porch  $1\frac{1}{2}$  inch; internal 2 inches. The eggs are three in number; their ground-colour is white, and they are thickly marked with reddish spots, varying in intensity of colour, the markings being much more numerous on the larger end and often confluent. A clutch taken on the 3rd February, 1897, by Mr. Barnard at Somerset, measure: A  $\cdot 80 \times \cdot 51$ , B  $\cdot 82 \times \cdot 48$ , C  $\cdot 82 \times \cdot 46$  inch.

I have occasionally found the egg of the Little Bronze Cuckoo (*Chalcites minutillus* Gould) in the nest of this bird, but much more frequently in the nests of *Gerygone magnirostris*. Mr. Barnard found many nests of *G. personata* containing one or two eggs partially dried; one nest contained three eggs too dry to blow, and three eggs placed on top of them perfectly fresh. The eggs' drying he attributed to the intense heat.